

Thursday, January 16, 2020

Attn: Mr. Keith Gammell Barnhardt Mfg. Co. 247 Main Rd P.O. Box 3 Colrain, MA 01340

Project ID: NPDES JANUARY 2020

SDG ID: GCE99347 Sample ID#s: CE99347

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301 CT Lab Registration #PH-0618 MA Lab Registration #M-CT007 ME Lab Registration #CT-007 NH Lab Registration #213693-A,B NJ Lab Registration #CT-003 NY Lab Registration #11301 PA Lab Registration #68-03530 RI Lab Registration #63 UT Lab Registration #CT00007 VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

January 16, 2020

SDG I.D.: GCE99347

Project ID: NPDES JANUARY 2020

Client Id	Lab Id	Matrix
EFFLUENT	CE99347	WASTE WATER



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Analysis Report

January 16, 2020

FOR: Attn: Mr. Keith Gammell

Barnhardt Mfg. Co.

247 Main Rd P.O. Box 3

Colrain, MA 01340

Custody Information Sample Information Date Time **WASTE WATER** 01/08/20 Matrix: Collected by:

Received by: Location Code: **BARNHARD** LB

> Standard Analyzed by: see "By" below

P.O.#: G11301 aboratory Data SDG ID: GCE99347

Phoenix ID: CE99347

Project ID: NPDES JANUARY 2020

EFFLUENT Client ID:

Rush Request:

RL/ Parameter Result **PQL** Units Dilution Date/Time Βy Reference Copper 0.169 0.003 mg/L 1 01/11/20 CPP E200.7 < 4.0 4.0 mg/L 2 RVM SM 5210B-11 B.O.D./5 day 01/09/20 14:15 B.O.D./5 day End Incubation 01/14/20 13:21 RVM SM 5210B-11 195 10 mg/L 1 01/09/20 NLM/MSFSM 5220C-11 5 0.65 0.25 01/15/20 KDB E350.1 Ammonia as Nitrogen mg/L Nitrite-N 0.955 0.050 mg/L 5 01/08/20 19:54 TB E353.2 5 E353.2 Nitrate-N 0.56 0.10 mg/L 01/08/20 19:54 TB < 0.015 0.015 1 01/13/20 MSF E420.4 Phenolics mg/L 5 Nitrogen Tot Kjeldahl 8.30 0.50 mg/L 01/15/20 KDB E351.1 1 Total Nitrogen 9.82 0.10 mg/L 01/15/20 KDB SM4500NH3/E300.0-11 1.06 0.050 5 Phosphorus, as P mg/L 01/10/20 SM4500PE-11 DJ/ARG SM 2540D-11 8.8 6.3 1.3 01/09/20 **Total Suspended Solids** mg/L 01/10/20 **Total Metals Digestion** Completed AG

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

Reviewed and Released by: Rashmi Makol, Project Manager

7:00

16:00

01/08/20



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QA/QC Report

January 16, 2020

QA/QC Data

SDG I.D.: GCE99347

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 513709 (mg/L), (2C Sam	ole No: (CE99279	(CE993	47)								
ICP Metals - Aqueous													
Copper	BRL	0.0025	0.187	0.166	11.9	97.1	97.5	0.4	86.9			75 - 125	20



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QA/QC Report

January 16, 2020

QA/QC Data

SDG I.D.: GCE99347

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 513436 (mg/L), C	C Samp	ole No:	CE97631	(CE993	47)								
Total Suspended Solids	BRL	2.5	18	20	NC	100						85 - 115	
QA/QC Batch 513670 (mg/L), C	C Samp	ole No:	CE99098	(CE993	47)								
Phosphorus, as P Comment:	BRL	0.01	0.577	0.566	1.90	99.2			100			85 - 115	20
Additional: LCS acceptance range	e is 85-11	5% MS a	acceptance	e range 7	75-125%								
QA/QC Batch 513466 (mg/L), C	C Samp	ole No:	CE99131	(CE993	47)								
B.O.D./5 day	BRL	2.0	<4.0	<4.0	NC	100			91.3			70 - 130	20
B.O.D./5 day GGA BOD						110						84 - 115	20
QA/QC Batch 513462 (mg/L), C	C Samp	ole No:	CE99347	(CE993	47)								
C.O.D. Comment:	BRL	10	195	193	1.00	102			91.3			85 - 115	20
	:- OF 11	E0/ MC		7	7F 10F0/								
Additional: LCS acceptance range			•	_		•							
QA/QC Batch 513327 (mg/L), C				•	•								
Nitrate-N	BRL	0.02	<0.02	< 0.02	NC	99.6			100			90 - 110	20
Nitrite-N	BRL	0.01	<0.010	<0.01	NC	93.6			96.8			90 - 110	20
QA/QC Batch 514121 (mg/L), C				•	•								
Ammonia as Nitrogen	BRL	0.05	1.22	1.22	0	102			100			90 - 110	20
Nitrogen Tot Kjeldahl Comment:	BRL	0.10	3.01	2.97	1.30	100			101			85 - 115	20
TKN is reported as Organic Nitrog	jen in the	Blank, L	.CS, DUP a	and MS.									
QA/QC Batch 513587 (mg/L), C	2C Sam	ole No:	CF00765	(CE993	47)								
Phenolics	BRL	0.015	<0.015	•	NC	94.3			96.5			90 - 110	20

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director

January 16, 2020

Thursday, January 16, 2020

Sample Criteria Exceedances Report

GCE99347 - BARNHARD

Criteria: None State: MA

State: MA

RL Analysis
SampNo Acode Phoenix Analyte Criteria Units
Result RL Criteria Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

^{***} No Data to Display ***



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Analysis Comments

January 16, 2020 SDG I.D.: GCE99347

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

_			10 to										_																
Cooler: Yes No	of Pg of or	oliect Options.	4113-624-3471 x3722	MEG 11301	This section MUST be	completed with	Bottle Quantities.		1400/40	I William	oos inos	TO BUSING										Data Format		I X PDF ☐ GIS/Key	EQuIS	Data Package		Other	* SURCHARGE APPLIES
Coo Coolant: IPM	Temp / Jah Pg o	Jara Dellyely/O		Project P.O.	This	8		•		Salar	000 100	05 CX 7.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1.6 1	+	*	4	7	*	7	×					MWRA eSMART		S-1 GW-2 S-1 GW-3	S-2 GW-2 S-2 GW-3 S-3 GW-2 S-3 GW-3		MA
·		Fax:	Phone:	2020 P							Total Service	8/2 B											Sertific		GW-2 GW-3	S-1 GW-1 🔲 S-1 G	S-2 GW-1	SW Protection	were collected:
	•	CT 06040	823	January	1/2		3	1	, i.e.	1000	12.03.00 20.00 20.	SOUNT TO										MA	RCP Cert	GW Protection] [] 5	GA Mobility			State where samples were collected:
	/ RECORD), Manchester, (Fax (860) 645-0823 645-8726	SACCI	3	3AMMAN-34		0	9	Za.	162/3	axily axio										티							•
	CHAIN OF CUSTODY RECORD	37	60	_	اک ا ::											1	1					≅	(Residential)	(Comm/Industrial)	Direct Exposure	GA Leachability	Go GW	Objectives	GB-GW Objectives
	CHAIN OF	: Middle Turnpik	Email: info@phoenixlabs.com Client Services (8)	Project:	1		QUOTE#		Analysis			(A)		_								Time:	1310	2 Join		round Time:	Days*	s Days" Standard	☐ Other ** SURCHARGE APPLIES
		587 East	Ē		MAN Rd	10			1.6.70	0	/aste Water Vipe OIL =Oil	e Time	├	ic 7pm		$\overline{}$	70L 20	20 77Am	79~			Date:	02-8-1	W1-8-2		Turnarot		Star Star	Other
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			ries, In	 	7	MASS			nation - Iden		SW=Surface \ e S=Soil SD r)	e Sample Matrix	S	U)(I)	Jum	July /	S C	W	3			Accepted by:	5		<i>></i>	ulations:			
	VALUE VILLE	X X X X X X X X X X	Environmental Laboratories, Inc	(Smy hard)	PO BOX3	O Vann			Client Sample - Information - Identification		Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Soild W=Wipe OIL=Oil B=Bulk L=Liquid X =(Other)	Customer Sample Identification	ではかられ	EFFLUCAL	EFF New Y	Effeluent	FRFIVENT	FFFINENT	EGY Jun T			Accep	ر اور			Comments, Special Requirements or Regulations:		٠	
			Environme	Customer:	Address:				Sampler's	Signature	Matrix Code: DW=Drinking Water RW=Raw Water SE B=Bulk L=Liquid X:	PHOENIX USE ONLY SAMPLE #	937)								Relinquished by:	1/1/1	ار ان		Comments, Special			